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EXAMINER	
BAKER, CHARLOTTE M	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/086,897	YOSHIDA, TOMOYUKI	
	Examiner	Art Unit	
	Charlotte M. Baker	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03/04/2002 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5, 8, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fotland (US 2001/0048529) in view of Lee (6,263,117).

Regarding claim 1: Fotland discloses a storage unit which stores reference image data (stored reference image, par. 25) generated based on image data for reference color patches (par. 29) to provide stored image data of the reference color patches (par. 29); a display unit (Fig. 2, display screen 28) which reproduces two images (par. 25), a first image (first digital file, par. 12) based on processed image data of the reference color patches (par. 29) after a predetermined plurality of images (pars. 24 and 26); and a second image (second digital file, par. 12) based on the reference image data stored in the storage unit (stored reference image, par. 25) containing the stored image data of the reference color patches (par. 29), and displays the two images so as to be contrasted with each other (par. 12); and an instruction unit (digital image control means, par. 12) which issues an instruction (color-blinking region)to execute calibration of conversion

characteristics in the processing for color conversion based on the two images displayed on the display unit (Fig. 2, display screen 28) (par. 12).

Fotland fails to specifically address at a time of software initialization of the image reading apparatus; scanned since the software initialization; taken at the time of software initialization.

Lee discloses at a time of software initialization (col. 3, ln. 30-48) of the image reading apparatus (col. 3, ln. 30-48); have been scanned since the software initialization (col. 3, ln. 30-48); taken at the time of software initialization (col. 3, ln. 30-48).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include time of the software initialization in order to provide an automatic image calibration as taught by Lee (col. 1, ln. 39-45).

Regarding claim 2: Fotland in view of Lee satisfy all the elements of claim 1. Fotland further discloses averaging unit (two images overlapped, par. 12) which averages the read image data for the reference color patches (par. 29), on a time varying basis (pars. 24 and 26), wherein the image data averaged by the averaging unit (two images overlapped, par. 12) is used as the read image data for the reference color patches (par. 29) that is displayed on the display unit (Fig. 2, display screen 28) as one of the images to be contrasted (par. 12).

Regarding claim 3: Fotland in view of Lee satisfy all the elements of claim 2. Fotland further discloses a storage unit (par. 12) which stores the image data averaged by the averaging unit (two images overlapped, par. 12), wherein the averaging unit (two images overlapped, par. 12) averages a currently read image data and the image data fetched from the storage unit (par. 12).

Regarding claim 4: Fotland in view of Lee satisfy all the elements of claim 1. Fotland further

discloses wherein the color conversion is processing for converting an RGB space (color image is scanned, par. 10) that is specific to the color image sensor (scanner), to a standard color space (YMCK, pars. 10 and 12), and the reference image data stored in the storage unit is data for the standard color space (YMCK, pars. 10 and 12).

Regarding claim 5: Fotland in view of Lee satisfy all the elements of claim 1. Fotland further discloses wherein the reference image data is data based on colorimetric values of the reference color patches (test patterns; YMCK, pars. 10 and par. 29).

Regarding claim 8: Fotland discloses a light source which emits light (Fig. 1, scanner 2), to which an image is exposed (par. 14); a color image sensor (Fig. 1, scanner 2) which reads the image as a target to be read exposed to the light to obtain image signals (par. 14), and outputs the image signals (Fig. 1, output of scanner 2 to original file 4); a color converter (Fig. 1, contained in scanner 2) which subjects the image signals to color conversion to obtain digital color image data and outputs the digital color image data (par. 14); a storage unit which stores reference image data (stored reference image, par. 25) generated based on reference color patches (par. 29) to provide stored image data of the reference color patches (par. 29); a display unit (Fig. 2, display screen 28) which reproduces two images (par. 12, first image file and second image file), a first image (par. 12, first image file) based on processed image data based on data obtained by reading the reference color patches (par. 29) by the color image sensor after a predetermined plurality of images (pars. 24 and 26); to obtain current image data for the reference color patches (pars. 10, 12 and 29), and a second image (par. 12, second digital file) based on the reference image data stored in the storage unit (par. 25, stored reference image) containing the stored image data of the reference color patches (par. 29), and which displays the two images so as to

be contrasted with each other (par. 12); and an instruction unit (par. 12, digital image control means) which issues an instruction (color-blinking region) to execute calibration of conversion characteristics in the processing for color conversion based on the images displayed on the display unit (Fig. 2, display screen 28) (par. 12).

Fotland fails to specifically address at a time of software initialization of the image reading apparatus; have been scanned since the software initialization; taken at the time of software initialization.

Lee discloses at a time of software initialization (col. 3, ln. 30-48) of the image reading apparatus (col. 3, ln. 30-48); have been scanned since the software initialization (col. 3, ln. 30-48); taken at the time of software initialization (col. 3, ln. 30-48).

Regarding claim 16: Fotland discloses reading reference color patches by a color image sensor (Fig. 1, scanner 2) to obtain image data for the reference color patches (pars. 12 and 29); of the computer program (a computer program is inherently taught as evidenced by Fotland (computer, par. 11) and various memories stored therein); performing processing on the image data for the reference color patches, and outputting the processed image data (par. 12); storing reference image data (par. 25, stored reference image) generated based on the processed image data for the reference color patches (par. 29) to provide stored image data of the reference color patches (par. 29); reproducing two images (par. 12, first image file and second image file), a first image (first digital file, par. 12) based on processed image data from the test of the reference color patches (par. 29) after a predetermined plurality of images (pars. 24 and 26); and a second image (par. 12, second digital file) based on the reference image data stored in the storage step (par. 25, stored reference image) containing the stored image data of the reference color patches (par. 29),

and displaying the two images so as to be contrasted with each other (par. 12); and issuing an instruction (color-blinking region) to execute calibration of conversion characteristics in the processing for color conversion based on the images displayed in the displaying step (Fig. 2, display screen 28) (par. 12).

Fotland fails to specifically address at a time of software initialization of the computer program; have been scanned since the software initialization; taken at the time of software initialization.

Lee discloses at a time of software initialization (col. 3, ln. 30-48); have been scanned since the software initialization (col. 3, ln. 30-48); taken at the time of software initialization (col. 3, ln. 30-48).

Regarding claim 17: Fotland in view of Lee satisfy all the elements of claim 16. Arguments analogous to those stated in the rejection of claim 2 are applicable. A computer program is inherently taught as evidenced by (computer, par. 11) and various memories stored therein.

Regarding claim 18: Fotland in view of Lee satisfy all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 3 are applicable. A computer program is inherently taught as evidenced by (computer, par. 11) and various memories stored therein.

Regarding claim 19: Fotland in view of Lee satisfy all the elements of claim 16. Arguments analogous to those stated in the rejection of claim 4 are applicable. A computer program is inherently taught as evidenced by (computer, par. 11) and various memories stored therein.

Regarding claim 20: Fotland in view of Lee satisfy all the elements of claim 16. Arguments analogous to those stated in the rejection of claim 5 are applicable. A computer program is inherently taught as evidenced by (computer, par. 11) and various memories stored therein.

4. Claims 7, 9-15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fotland in view of Kodama (5,241,347).

Regarding claim 7: Fotland in view of Lee satisfy all the elements of claim 1. Fotland further discloses wherein the reference image data is based on data obtained by reading the reference color patches (par. 29); of the image reading apparatus by the color image sensor (Fig. 1, scanner 2) to obtain image data for the reference color patches (par. 14), and by performing color conversion on the image data (RGB to CMYK, par. 10).

Fotland fails to specifically address in an initial state at the time of manufacture .

Kodama discloses in an initial state at the time of manufacture (col. 5, ln. 28-36).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include an initial state at the time of manufacture in order to reproduce an image having a proper image density as taught by Kodama (col. 3, ln. 48-56).

Regarding claim 9: Fotland discloses emitting light by a light source (Fig. 1, scanner 2) and exposing an image to the light (par. 14); reading the image as a target to be read exposed to the light by a color image sensor (Fig. 1, scanner 2) to obtain image signals and outputting the image signals (par. 14); color-converting the image signals to digital color image data (Fig. 1, contained in scanner 2) and outputting the digital color image data (par. 14); storing reference image data (stored reference image, par. 25) generated based on reference color patches (par. 29) to provide stored image data of the reference color patches taken after a predetermined plurality of images have been taken by the reading step (pars. 24 and 26); reproducing two images (par. 12, first image file and second image file), a first image (par. 12, first image file) based on data obtained by reading the reference color patches (par. 29); of an image reading apparatus (Fig. 1, scanner

2) by the color image sensor in the reading step to obtain image data for the reference color patches and by converting the image data in the color converting step (pars. 10, 12 and 29) and a second image (par. 12, second digital file) based on the reference image data stored in the storing step (par. 25, stored reference image) containing the stored image data of the reference color patches (par. 29), and displaying the two images so as to be contrasted with each other (par. 12); and issuing an instruction (color-blinking region) to execute calibration of conversion characteristics in the color converting step based on the images displayed (Fig. 2, display screen 28) in the displaying step (par. 12).

Fotland fails to specifically address in an initial state at the time of manufacture.

Kodama disclose in an initial state at the time of manufacture (col. 5, ln. 28-36).

Regarding claim 10: Fotland in view of Kodama satisfy all the elements of claim 9. The structural elements of claim 2 perform all of the steps of method claim 10. Thus, claim 10 is rejected for the same reasons discussed in the rejection of claim 2.

Regarding claim 11: Fotland in view of Kodama satisfy all the elements of claim 10. The structural elements of claim 3 perform all of the steps of method claim 11. Thus, claim 11 is rejected for the same reasons discussed in the rejection of claim 3.

Regarding claim 12: Fotland in view of Kodama satisfy all the elements of claim 9. The structural elements of claim 4 perform all of the steps of method claim 12. Thus, claim 12 is rejected for the same reasons discussed in the rejection of claim 4.

Regarding claim 13: Fotland in satisfies all the elements of claim 9. The structural elements of claim 5 perform all of the steps of method claim 13. Thus, claim 13 is rejected for the same reasons discussed in the rejection of claim 5.

Regarding claim 14: Fotland satisfies all the elements of claim 13. The structural elements of claim 6 perform all of the steps of method claim 14. Thus, claim 14 is rejected for the same reasons discussed in the rejection of claim 6.

Regarding claim 15: Fotland satisfies all the elements of claim 9. The structural elements of claim 7 perform all of the steps of method claim 15. Thus, claim 15 is rejected for the same reasons discussed in the rejection of claim 7.

Regarding claim 22: Fotland in view of Lee satisfy all the elements of claim 16. Arguments analogous to those stated in the rejection of claim 7 are applicable. A computer program is inherently taught as evidenced by Fotland (computer, par. 11) and various memories stored therein.

5. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fotland in view of Lee and further in view of Whiting et al. (6,618,170).

Regarding claim 6: Fotland in view of Lee satisfy all the elements of claim 5. Fotland further discloses wherein reference image data (color separation files); colorimetric values of the reference patches (YMCK, pars. 10 and 29).

Fotland fails to specifically address adding a predetermined variation.

Whiting et al. disclose adding a predetermined variation (controlling color hue in a printer output, Figs. 3A-3E and col. 4, ln. 11-45).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include adding a predetermined variation in order to control color hue as taught by Whiting et al. (col. 4, ln. 10-17).

Regarding claim 21: Fotland in view of Lee satisfy all the elements of claim 20. Arguments analogous to those stated in the rejection of claim 6 are applicable. A computer program is inherently taught as evidenced by Fotland (computer, par. 11) and various memories stored therein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMB

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